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EXAMINER	
OSBERG, THUY THANH	
ART UNIT	**PAPER NUMBER**
2179	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/650,622	GLASS, ANDREW C.	
	Examiner	Art Unit	
	Thuy Osberg	2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 08/28/2003.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-62 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-62 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 02/09/2004.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1. This communication is responsive to the original application filed 08/28/2003.

This action is Non-Final. Claims 1-62 are pending and have been examined.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1, 3-6, 9-28, 38-41, 44-47, 49-54, 56-57 and 59-60 are rejected under 35 U.S.C. 102(e) as being anticipated by Gray et al. (US Patent 6,674,403), hereinafter "Gray"

As claim 1, Gray teaches a system that facilitates discovery and display of devices (Abstract; fig. 1, labels 120, 130, 140; col. 6, lines 26-43, lines 54-64), comprising:
a detection component (fig. 1; col. 6, lines 26-64, col. 10, lines 35-42) that dynamically identifies a multi-dimensional location of wireless devices of a network relative to a new wireless device (fig. 6; col. 13, lines 16-31, that with a ability to determine the location of the mobile device, that the new device can be identified within wireless network);

and a display component that renders a multi-dimensional representation of respective locations of the devices (fig. 7; col. 14, lines 47-59).

As claim 3, Gray further teaches the respective locations of the devices are displayed relative to the new device (fig. 6; col. 13, lines 16-31, that using clustering statistics to group devices in different locations).

As claim 4, Gray further teaches the respective locations of at least one of the devices and the new device are displayed on the new device relative to a fixed point (fig. 6; label 610; col. 13, lines 16-31, that using clustering statistics to group devices in different locations and fixed point is at label 610).

As claim 5, Gray further teaches the respective locations of the devices whether moving or stationary are displayed dynamically relative to the new device while the new device is moving (Abstract, that when a defined space is set, the device can move or stationary; fig. 7; col. 14, lines 47-59).

As claim 6, Gray further teaches the new device and one or more devices are moving such that the respective locations of the one or more moving devices are presented dynamically via the display component (Abstract, that when a defined space is set, the device can move or stationary; fig. 7; col. 14, lines 47-59).

As claim 9, Gray further teaches a filter that filters out barrier materials interstitial to one or more of the devices and the new device such that the devices may be sensed and displayed

(col. 12, lines 8-29; col. 14, lines 47-59, that by adjusting the strength of the signal it will override the barriers and allow the devices to be sensed (located) and displayed via the graphical user interface).

As claim 10, Gray further teaches a filter that accesses a lookup table of barrier material properties to facilitate sensing and presenting one or more of the devices that are located beyond the corresponding barrier materials (col. 12, lines 8-29 and lines 40-49; col. 14, lines 47-59, that by adjusting the strength of the signal it will override the barriers and allow the devices to be sensed (located) and displayed via the graphical user interface).

As claim 11, Gray further teaches a filter that selects a subset of the devices according to at least one of frequency bandwidth and wireless technology (fig. 14, label 127; col. 6 lines 20-25, that IEEE 802.11 standard transmits on the 2.4 GHz frequency (band) and the Bluetooth transmits on the same (band) but has 79 channels each 1 MHz wide; col. 15, lines 61-67; col. 16, lines 1-4).

As claim 12, Gray further teaches the detection component utilizes analytical results of radio wave characteristics to dynamically determine a location of walls, floors, and other barriers within a given space (col. 3, lines 42-50; col. 4. lines 37-45).

As claim 13, Gray further teaches the devices include at least one of wireless input devices, wireless peripheral devices, and wireless network access points (col. 6, lines 21-26).

As claim 14, Gray further teaches the input devices include at least one of a mouse and a keyboard (col. 6, lines 20-25 and 34-38, that a wireless laptop inherently has a keyboard and further a PDA can incorporate a keyboard and mouse with bluetooth technology).

As claim 15, Gray further teaches the new device communicates in at least one of a 2.4 GHz and 5 GHz radio band (col. 6, lines 20-25, that IEEE 802.11 standard transmits on the 2.4 GHz frequency (band)).

As claim 16, Gray further teaches the new device communicates according to at least one of an IEEE 802.11 standard, an ultrawideband regime, and a radio frequency identification regime (col. 6, lines 20-25, that IEEE 802.11 standard transmits on the 2.4 GHz frequency (band)).

As claim 17, Gray further teaches the detection component automatically extends a sensing range to detect at least one of a predetermined type of the devices. (col. 10, lines 35-42).

As claim 18, Gray further teaches the detection component automatically extends a sensing range to detect a predetermined number of the devices (col. 10, lines 35-42).

As claim 19, Gray further teaches a communication component that receives a map of device locations, which map is presented by the display component in the two- or three-dimensional representation (fig. 7; col. 14, lines 47-59).

As claim 20, Gray further teaches the display component presents at least one of a graphical representation of the devices and a corresponding textual identifier (col. 14, lines 38-51).

As claim 21, Gray further teaches a portable terminal device according to the system of claim 1 (col. 6, lines 34-38, that the personal digital assistant (PDA) is a portable terminal).

As claim 22, Gray further teaches a computer according to the system of claim 1 (col. 6, lines 34-38, describing a wireless laptop computer).

As claim 23, Gray further teaches a classifier that automatically determines which of the devices is available for use by a user of the new device, and which of the available devices to direct the user (fig. 1, label 110; col. 6, lines 52-67; col. 7, lines 1-9, that the system manager provides an interface to other systems that are available).

As claim 24, Gray further teaches the classifier directs the user of the new device to the available devices by presenting the two- or three-dimensional representation to the user (fig. 7; col. 6, lines 52-67; col. 7, lines 1-9; col. 14, lines 47-59, that the other devices are shown on a display).

As claim 25, Gray further teaches the classifier is a support vector machine (col. 9, lines 1-14 and lines 41-46).

As claim 26, Gray further teaches the available devices include data ports (fig. 1, labels, 110, 160; col. 9, lines 1-14, that the access points include data ports to collect data result).

As claim 27, Gray further teaches the detection component conserves power by beginning at a low signal strength and automatically increasing the signal strength until the desired result is reached (fig. 3b; col. 10, lines 5-59; col. 11, lines 6-9; col. 12, lines 8-23, that by training based on the strength of the signal the model is developed off the information to produce the desired results).

As claim 28, Gray further teaches the result includes at least one of detecting a predetermined number of the devices, detecting a predetermined number of device types, and reaching a predetermined signal strength (fig. 1; fig. 6; col. 6, lines 26-64; col. 10, lines 35-42; col. 13. lines 16-31).

As claim 38, Gray teaches a method of discovering and displaying devices (Abstract; fig. 1, labels 120, 130, 140; col. 6, lines 26-43, lines 54-64), comprising:
dynamically detecting (fig. 1; col. 6, lines 26-64, col. 10, lines 35-42) a multi-dimensional location of a wireless device relative to a portable terminal (fig. 6; col. 13, lines 16-31, that with the ability to determine the location of the mobile device);
and presenting a multi-dimensional representation of the location of the device on the portable terminal (fig. 7; col. 14, lines 47-59).

As claim 39, Gray further teaches the location of the device is displayed relative to the portable terminal (fig. 6; col. 13, lines 16-31, that using clustering statistics to group devices in

different locations).

As claim 40, Gray further teaches dynamically displaying the multi-dimensional representation of the location of the device relative to the portable terminal when the portable terminal is moving (Abstract, that when a defined space is set, the device can move or stationary; fig. 7; col. 14, lines 47-59).

As claim 41, Gray further teaches dynamically displaying the multi-dimensional representation of the location of the device relative to the portable terminal when both the device and the portable terminal are moving (Abstract, that when a defined space is set, the devices can move or stationary; fig. 7; col. 14, lines 47-59).

As claim 44, Gray further teaches the filtering out barrier materials interstitial to the devices and the new device such that the devices may be sensed (col. 12, lines 8-29; col. 14, lines 47-59, that by adjusting the strength of the signal it will override the barriers and allow the devices to be sensed (located)).

As claim 45, Gray further teaches the device is one of a wireless input device, wireless peripheral device, and wireless network access (col. 6, lines 21-26).

As claim 46, Gray further teaches automatically extending a sensing range to detect the device (col. 10, lines 35-42).

As claim 47, Gray further teaches comprising automatically extending a sensing range to detect a predetermined number of the devices (col. 10, lines 35-42).

As claim 49, Gray further teaches proxying the portable terminal through a device location system such that the location of the wireless device is obtained and presented on the portable terminal (col. 3, lines 31-41, that the mobile device can access to one or more networks).

As claim 50, Gray further teaches generating at least one map in response to detecting the wireless device, the map presented on the portable terminal to show the location of the device (fig. 7; col. 14, lines 47-59).

As claim 51, Gray further teaches the map is generated dynamically in at least one of a background and a foreground (col. 6, lines 65-67; col. 7 lines 1-10, that by generating the map in memory (background) and displaying the current location by continuous updating in the foreground).

As claim 52, Gray further teaches the map is presented while another map is being generated in the background (fig 7; col. 6, lines 4-6; col. 7, lines 1-10, that by generating the map in memory (background) and displaying the current location on the mobile device).

As claim 53, Gray teaches a system that facilitates the discovery and display of devices (Abstract; fig. 1, labels 120, 130, 140; col. 6, lines 26-43, lines 54-64), comprising:

means for dynamically detecting a multi-dimensional physical location of a wireless device (fig. 1; col. 6, lines 26-64, col. 10, lines 35-42; fig. 6; col. 13, lines 16-31, that with the ability to determine the location of the mobile device, that the new device can be identified within a wireless network);

and means for presenting on a portable terminal a multi-dimensional representation of the physical location of the device relative to the portable terminal (fig. 7; col. 14, lines 47-59).

As claim 54, Gray teaches a graphical user interface of a computer that facilitates the discovery and display of wireless devices (Abstract; fig. 1, labels 120, 130, 140; col. 6, lines 26-43, lines 54-64), the interface comprising:

an input component for processing management an input component for processing management (col. 14, lines 63-67; col. 15, lines 1-5, that the pop-up text message box or icon receive input function), the management information is associated with at least one of configuring the computer according to configuration information (fig. 6; col. 13, lines 16-31, that with a ability to determine the location of the mobile devices within wireless network) and detecting the device locations (fig. 1; col. 6, lines 26-64, col. 10, lines 35-42);

and a presentation component for presenting a 2-D or 3-D representation of the locations of one or more of the detected devices based upon the management information (fig. 7; col. 14, lines 47-59).

As claim 56, Gray further teaches the filter criteria comprises at least one of wireless technology and frequency bandwidth (fig. 14, label 127; col. 6 lines 20-25, that IEEE 802.11 standard transmits on the 2.4 GHz frequency (band) and the Bluetooth transmits on the same (band) but has 79 channels each 1 MHz wide; col. 15, lines 61-67; col. 16, lines 1-4).

As claim 57, Gray further teaches a mapping feature that maps a representative location in space of a detected device relative to other detected devices (fig. 7; col. 14, lines 47-59).

As claim 59, Gray further teaches a mapping feature that automatically maps device location information according to predetermined spatial criteria (col. 12, lines 8-33 and lines 40-49; col. 14, lines 47-59; that by adjusting the strength of the signal it will sense and locate the devices that are selected based on data provided from being trained).

As claim 60, Gray further teaches a graphical floor layout of individual device location graphics, wherein the floor layout and location graphics are selectable (fig. 7, labels 710, 720; col. 14, lines 47-59).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 2, 55 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gray in view of Miyake et al. (US Pub 2001/0042118), hereinafter Miyake

As claim 2, Gray does not teach the multi-dimensional location is a three-dimensional location.

However, Miyake teaches the multi-dimensional location is a three-dimensional location (Abstract, lines 19-20; fig. 78, label 47; par [0233], lines 1-6). Therefore, it would have been obvious to one ordinary skill in the art the time the invention to modify Gray by having the multi-dimensional location is a three-dimensional location as taught by Miyake in order to view and manipulate the display in the respective display areas easily (Miyake: Abstract, lines 19-23).

As claim 55, Gray does not teach the configuration information includes at least one of an implementation, device type, environment, sensing range mode, and filter criteria.

However, Miyake teaches the configuration information includes at least one of an implementation, device type, environment, sensing range mode, and filter criteria (par [0015] that the collecting device is for collecting information for the overall network environment). Therefore, it would have been obvious to one ordinary skill in the art the time the invention to modify Gray by having the configuration information includes at least one of an implementation, device type, environment, sensing range mode, and filter criteria as taught by Miyake in order to provide the overall status of the network.

As claim 62, Gray does not teach a graphical means to display a color and/or a pattern corresponding to user preference information.

However, Miyake teaches a graphical means to display a color and/or a pattern corresponding to user preference information (par [0028]). Therefore, it would have been obvious to one ordinary skill in the art the time the invention to modify Gray by having a

graphical means to display a color and/or a pattern corresponding to user preference information as taught by Miyake in order to give the user the ability to select his/her preferences.

6. Claims 7-8, 29-30, 42-43, 48, 58, 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gray in view of Hollenberg (US Patent 6,091,956).

As claim 7, Gray does not teach a filter that selects a subset of the devices the locations of which are presented by the display component.

However, Hollenberg teaches a filter that selects a subset of the devices the locations of which are presented by the display component (fig. 14, label 127; col. 15, lines 61-67; col. 16, lines 1-4). Therefore, it would have been obvious to one ordinary skill in the art the time the invention to modify Gray by having a filter that selects a subset of the devices the locations of which are presented by the display component as taught by Hollenberg in order to display selected devices based on filtering out unwanted devices, providing a clearer display.

As claim 8, Gray does not teach a filter that facilitates presenting a subset of the devices in a selected volume of space.

However, Hollenberg teaches a filter that facilitates presenting a subset of the devices in a selected volume of space (fig. 14, label 127; col. 15, lines 61-67; col. 16, lines 1-4). Therefore, it would have been obvious to one ordinary skill in the art the time the invention to modify Gray by having a filter that facilitates presenting a subset of the devices in a selected volume of space as taught by Hollenberg in order to provide a display of devices located only within an area by filtering out unwanted areas, providing a specific area for display.

As claim 29, Gray does not teach the display component facilitates assigning a graphical representation of a vector to a displayed representation of one of the devices.

However, Hollenberg teaches the display component facilitates assigning a graphical representation of a vector to a displayed representation of one of the devices (fig. 4, labels 6g, 6f; col. 15, lines 2-4; col. 16, lines 17-21, that a feature could be a device), which vector indicates at least one of distance and direction of the device relative to the new device (fig. 11, col. 21, lines 39-51). Therefore, it would have been obvious to one ordinary skill in the art the time the invention to modify Gray by having teach the display component facilitates assigning a graphical representation of a vector to a displayed representation of one of the devices as taught by Hollenberg in order to give a symbol representing a direction of an available device, making it easy for a user to locate (e.g., printer) in which he/she must use.

As claim 30, Gray does not teach an input component that accommodates at least one of voice input, touch screen input, and input device signals.

However, Hollenberg teaches an input component that accommodates at least one of voice input, touch screen input, and input device signals (fig. 2, label 2a; col. 12, lines 12-22). Therefore, it would have been obvious to one ordinary skill in the art the time the invention to modify Gray by having an input component that accommodates at least one of voice input, touch screen input, and input device signals as taught by Hollenberg in order to enhance the user's ability to provide speedy input via a touch screen.

As claim 42, Gray does not teach filtering a plurality of detected remote wireless devices to select the device.

However, Hollenberg teaches filtering a plurality of detected remote wireless devices to select the device (fig. 14, label 127; col. 15, lines 61-67; col. 16, lines 1-4). Therefore, it would have been obvious to one ordinary skill in the art the time the invention to modify Gray by filtering a plurality of detected remote wireless devices to select the device as taught by Hollenberg in order to for the user to filter out unwanted/unneeded devices to select the desired device by use of elimination.

As claim 43, Gray does not teach filtering a plurality of detected wireless devices to present only those devices in a selected volume of space.

However, Hollenberg teaches filtering a plurality of detected wireless devices to present only those devices in a selected volume of space (fig. 14, label 127; col. 15, lines 61-67; col. 16, lines 1-4). Therefore, it would have been obvious to one ordinary skill in the art the time the invention to modify Gray by filtering a plurality of detected wireless devices to present only those devices in a selected volume of space as taught by Hollenberg in order to provide a display of devices located only within an area by filtering out unwanted areas, providing a specific area for display.

As claim 48, Gray further teaches the multi-dimensional representation includes at least one of a graphic representative of the device, a text identifier associated with the device (col. 14, lines 38-51).

Gray does not teach a location vector that corresponds to an approximate direction and distance of the device relative to the portable terminal (fig. 4, labels 6g, 6f; col. 15, lines 2-4; col. 16, lines 17-21, that a feature could be a device; fig. 11, col. 21, lines 39-51).

However, Hollenberg teaches a location vector that corresponds to an approximate direction and distance of the device relative to the portable terminal (fig. 4, labels 6g, 6f; col. 15, lines 2-4; col. 16, lines 17-21; fig. 11, col. 21, lines 39-51). Therefore, it would have been obvious to one ordinary skill in the art the time the invention to modify Gray by having a location vector that corresponds to an approximate direction and distance of the device relative to the portable terminal as taught by Hollenberg in order to give a graphical representation as a guide for the user to an available device.

As claim 58, Gray does not teach the presentation component provides a graphical representation of a location vector.

However, Hollenberg teaches the presentation component provides a graphical representation of a location vector (fig. 4, labels 6g, 6f; col. 15, lines 2-4; col. 16, lines 17-21, that a feature could be a device) that indicates a direction and distance of the computer from a detected device (fig. 11, col. 21, lines 39-51). Therefore, it would have been obvious to one ordinary skill in the art the time the invention to modify Gray by having the presentation component provides a graphical representation of a location vector as taught by Hollenberg in order to order to give a symbol representing a direction of an available device, making it easy for a user to locate the respective device in which he/she must use.

As claim 61, Gray does not teach the presentation component further comprises at least one of means for selecting a floor in the building and means for selecting one of the device locations.

However, Hollenberg teaches the presentation component further comprises at least one of means for selecting a floor in the building and means for selecting one of the device

locations (fig. 2; col. 12, lines 22-32). Therefore, it would have been obvious to one ordinary skill in the art the time the invention to modify Gray by having the presentation component further comprises at least one of means for selecting a floor in the building and means for selecting one of the device locations as taught by Hollenberg in order to enhance the users ability to narrow down the amount of devices to a specific floor to easier locate a specific device.

7. Claims 31-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gray in view of Miyake and further in view of Hollenberg.

As claim 31, Gray teaches a system that facilitates discovery and presentation of devices (Abstract; fig. 1, labels 120, 130, 140; col. 6, lines 26-43, lines 54-64), comprising:
a detection component (fig. 1; col. 6, lines 26-64, col. 10, lines 35-42) that dynamically identifies location data of wireless devices of a network relative to a new wireless device (fig. 6; col. 13, lines 16-31, that with the ability to determine the location of the mobile device, that the new device can be identified within a wireless network);
and a presentation component that presents via the new device a two- or three-dimensional graphical representation of respective locations of the devices (fig. 7; col. 14, lines 47-59).

Gray does not teach a three-dimensional location.

However, Miyake teaches the multi-dimensional location is a three-dimensional location (Abstract, lines 19-20; fig. 78, label 47; par [0233], lines 1-6). Therefore, it would have been obvious to one ordinary skill in the art the time the invention to modify Gray by having multi-dimensional location is a three-dimensional location in order to view and manipulate to enhance the display in the respective display areas (Miyake: Abstract, lines 19-23).

Gray and Miyake do not teach a filter component that filters the location data according to predetermined location criteria.

However, Hollenberg teaches a filter component that filters the location data according to predetermined location criteria (fig. 14, label 127; col. 15, lines 61-67; col. 16, lines 1-4). Therefore, it would have been obvious to one ordinary skill in the art the time the invention to modify Gray and Miyake by having a filter component that filters the location data according to predetermined location criteria as taught by Hollenberg in order to provide a user with information on devices that are available in the specific location.

As claim 32, Gray and Miyake do not teach the respective locations of the devices are displayed relative to the new device, and include a floor identifier associated with the location of an identified device.

However, Hollenberg teaches the respective locations of the devices are displayed relative to the new device, and include a floor identifier associated with the location of an identified device (fig. 2, label 3c; col. 12, line 25). Therefore, it would have been obvious to one ordinary skill in the art the time the invention to modify Gray and Miyake by having the respective locations of the devices are displayed relative to the new device, and include a floor identifier associated with the location of an identified device as taught by Hollenberg in order to provide the user upon introducing a device to an area it will identify the floor on which other devices are located enhances the ability of the user to locate devices with ease.

As claim 33, Gray further teaches the presentation component includes at least one of audio and video capability (col. 14, lines 38-51).

As claim 34, Gray further teaches The system of claim 31, the location criteria includes a predetermined volume of space (fig. 3B, labels A, B, C, D; fig. 4, label 410; col. 11, lines 6-9; col. 8, lines 1-14).

As claim 35, Gray further teaches the location criteria includes analyzing and processing barrier materials that interfere with detecting the devices (col. 12, lines 8-29 and lines 40-49; col. 14, lines 47-59, that by adjusting the strength of the signal it will override the barriers and allow the devices to be sensed (located) through analysis of the barrier materials).

As claim 36, Gray further teaches the location criteria includes a fixed detection range based upon a given implementation (fig. 2; col. 7, lines 30-43).

As claim 37 Gray further teaches a communication component that receives a map of device locations, which map is presented by the presentation component in the two- or three-dimensional representation (fig. 7; col. 14, lines 47-59).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ramanathan et al. (US Patent 6,286,047) – Method and system for automatic discovery of network services.

McCorkle et al (US Patent 7,039,392) – System and method for providing device authentication in a wireless network.

Blair et al. (US Patent 5,809,265) – System and method for managing virtual connections between devices on a network.

Rappaport et al. (US Patent 6,317,599) – Method and system for automated optimization of antenna position in 3-D.

Kondo et al. (US Patent 5,586,254) – System for managing and operating a network by physically imaging the network.

Dev et al. (US Patent 5,295,244) – Network management system using interconnected hierarchies to represent different network dimensions in multiple display views.

Battat et al. (US Patent 5,958,012) – Network management system using virtual reality techniques to display and simulate navigation to network components.

Messinger (US Patent 5,793,974) – Network navigation and viewing system for network management.

Hirai (US Patent 6,324,577) – Network management system for managing states of nodes.

Agrawala et al. (US Pub 2005/0020275) – Method and system and computer program product for positioning and synchronizing wireless communication nodes.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy Osberg whose telephone number is 571-270-1258. The examiner can normally be reached on Monday-Friday (8:30AM-5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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